

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/778,904
Attorney Docket No. Q63103

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original): A route design system among nodes from at least one of starting node through a plurality of relay nodes to a terminal node, comprising:

route candidate design means for designing a plurality of different route candidates from said at least one of starting node to said terminal node; and

accommodation means for accommodating a demand in a predetermined one of the routes designed by said route candidate design means, according to a predetermined procedure.

2. (original): A route design system according to Claim 1,

wherein said route candidate design means includes: a band assignment unit for assigning bands available in the individual route candidates to said plurality of different route candidates; and a priority ordering unit for ordering the priorities of said individual route candidates, and

wherein said accommodation means includes a decision unit for deciding whether or not the route of the first priority has a space band no more than the band demanded by said route of the first priority, whereby said demand is accommodated in said route of the first priority if said decision unit decides that said space band is had.

3. (original): A route design system according to Claim 2,

wherein said accommodation means accommodates said demand in the route of a second priority, if said decision unit decides that said space band is not had.

4. (original): A route design system according to Claim 3,

wherein said accommodation means further includes an exchange unit for exchanging said route of the first priority and said route of the second priority after said demand was accommodated in said route of the second priority,

5. (original): A route design system according to Claim 1,

wherein said route candidate design means includes: a band assignment unit for assigning, after a preliminary band was retained, the remaining bands to said plurality of different route candidates; and a priority ordering unit for ordering the priorities of said individual route candidates, and

wherein said accommodation means includes a decision unit for deciding whether or not the route of the first priority has a space band no more than the band demanded by said route of the first priority, whereby said demand is accommodated in said route of the first priority if said decision unit decides that said space band is had.

6. (original): A route design system according to Claim 5,

wherein said accommodation means accommodates said demand by using the space band of said route of the first priority and said preliminary band, if said decision unit decides that said

space band is not had and if the total of the space band of said route of the first priority and said preliminary band is no less than the band demanded by said demand.

7. (original): A route design method among nodes from at least one of starting node through a plurality of relay nodes to a terminal node, comprising:

a route candidate design step for designing a plurality of different route candidates from said starting node to said terminal node; and

an accommodation step for accommodating a demand in a predetermined one of the routes designed by said route candidate design step, according to a predetermined procedure.

8. (original): A route design method according to Claim 7,

wherein said route candidate design step includes: a band assignment step for assigning bands available in the individual route candidates to said plurality of different route candidates; and a priority ordering step for ordering the priorities of said individual route candidates, and

wherein said accommodation step includes a decision step for deciding whether or not the route of the first priority has a space band no more than the band demanded by said route of the first priority, whereby said demand is accommodated in said route of the first priority if said decision step decides that said space band is had.

9. (original): A route design method according to Claim 8,

wherein said accommodation step accommodates said demand in the route of a second priority, if said decision step decides that said space band is not had.

10. (original): A route design method according to Claim 9,

wherein said accommodation step further includes an exchange step for exchanging said route of the first priority and said route of the second priority after said demand was accommodated in said route of the second priority.

11. (original): A route design method according to Claim 7,

wherein said route candidate design step includes: a band assignment step for assigning, after a preliminary band was retained, the remaining bands to said plurality of different route candidates; and a priority ordering step for ordering the priorities of said individual route candidates, and

wherein said accommodation step includes a decision step for deciding whether or not the route of the first priority has a space band no more than the band demanded by said route of the first priority, whereby said demand is accommodated in said route of the first priority if said decision step decides that said space band is had.

12. (original): A route design method according to Claim 11,

wherein said accommodation step accommodates said demand by using the space band of said route of the first priority and said preliminary band, if said decision step decides that said space band is not had and if the total of the space band of said route of the first priority and said preliminary band is no less than the band demanded by said demand.

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13. (new): A route design system according to claim 1, wherein said accommodation means comprises:

a primary accommodation design unit; and

a secondary accommodation design unit;

wherein said primary accommodation design unit executes an accommodation attempt for said demand on a route candidate of a first priority, and said secondary accommodation design unit accommodates said demand on a route candidate of a second priority if a space band demanded by said demand does not exist in said route candidate of a first priority.

14. (new): A route design system according to claim 1, wherein said predetermined procedure comprises an accommodation of said demand in a route candidate of a first priority when said route candidate of a first priority has a sufficient space band, and an accommodation of said demand in a route candidate of a second priority when said route candidate of a first priority does not have a sufficient space band.

15. (new): A route design system according to claim 14, wherein accommodation of said demand in a route candidate of a second priority is performed immediately upon a determination of said route candidate of a first priority having insufficient space band.

16. (new): A route design method according to claim 7, wherein said predetermined procedure comprises:

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accommodating said demand in a route candidate of a first priority when said route candidate of a first priority has a sufficient space band; and

accommodating said demand in a route candidate of a second priority when said route candidate of a first priority does not have a sufficient space band.

17. (new): A route design method according to claim 16, wherein said accommodating said demand in a route candidate of a second priority is performed immediately upon a determination of said route candidate of a first priority having insufficient space band.